

## **GAIN STABILIZATION TECHNIQUE FOR NARROW BAND INTEGRATED LOW NOISE AMPLIFIERS**

### **ABSTRACT OF THE DISCLOSURE**

A resonant load circuit is disposed in an integrated circuit, where the resonant load circuit includes an integrated inductance in parallel with an integrated capacitance, and further includes a first integrated resistance  $R_s$  in series with one of the inductance and capacitance, preferably in series with the inductance, and a second integrated resistance  $R_p$  in parallel with the inductance and capacitance. The first and second integrated resistances have values selected for reducing an amount of resonant load circuit Q over a plurality of instances of the integrated circuit. In a preferred, but non-limiting, embodiment the resonant load circuit forms a load in an RF low noise amplifier, such as a balanced inductively degenerated common source low noise amplifier (LNA).